Betty Ca 0000091959

SW-20379A-05-0489
W-20380A-05-0490

From: Denise Bensusan [denise.bensusan@frontiernet.net]
Sent: Wednesday, December 17, 2008 10:42 AM
To: Gleason-WebEmail; Mayes-WebEmail; Mundell-Web; Hatch-WebEmail
Subject: Perkins/Utilities Inc
Importance: High
Attachments: sacbasinltr032108.doc

RECEIVED
2008 DEC 17 A 11:42
AZ CORP COMMISSION
DOCKET CONTROL

Arizona Corporation Commission
DOCKETED
DEC 17 2008
DOCKETED BY

ORIGINAL

sacbasinltr032108.doc (68 KB)

OPEN MEETING AGENDA ITEM

To the ACC:

This communication is in regard to the Perkins/Utilities Inc i.e. Rhodes Homes being decided December 18th in front of this honorable committee.
Attached is a document that the Northwest Arizona Watershed Council (NAWC) sent to ADWR concerning water levels in Sacramento Basin. Please review the communication in full. "The NAWC feels that recent water studies that used historic basin water use data to calculate committed demand should be re-evaluated using the new demand number, 16,000 acre feet per year, of the soon-to-be commissioned mill. Not using the new number for water demand will grossly underestimate the water drawdown and could lead to the water table falling below the 1,200' level". John Gall (Mr. Rhodes hired gun) will claim that the mine is not currently producing at full capacity and that this relieves this study of validity. Nothing could be further from the truth. The mine is simply at a slow down current day as is our entire economy here in America. The mine is vested in this area and will be a constant impact on the water level for many, many years to come. Good Science is always appreciated by ADWR as long as it doesn't get in the way of progress at any price. When that same Science slows down the empire building Rhodes Homes then it is ignored, illegitimately debunked and discarded.

I know that the ACC is well aware of the back door politics and the paying off of public officials by Mr. Rhodes and his representatives. We as citizens appreciate all that you do to protect our communities from the destructive practices of the same. You have come out strong in opposition to Rhodes in the past for a multitude of appropriate reasons. NOTHING has changed current day. He has simply manipulated the system to make it appear that someone reputable will take the reins from his own corrupt hands.
Nothing could be further from the truth. In the real world we all know the facts. This was simply a maneuver to get the ACC to approve his water company which he will be running no matter what the paperwork says. We are still speaking of the same man, the same entity and the same deep corruption (and deep pockets) that surrounds him and his empire. This is not simply my own personal opinion of the Rhodes Empire but documented fact.

The attached document is appropriate, true and based in accurate scientific fact and yet ADWR refused to investigate the issue further. Mr. Rhodes paid for a hydrologist to mislead the world concerning the amount of water available in the area and this is just the tip of the iceberg.

I am asking that you make a motion (or whatever legal step needs to be taken) to challenge the validity of the hydrology and the accuracy of ALL information submitted by Rhodes and his representatives. This is a serious matter and more time is needed to assess the facts from the fiction! The hydrology submitted to all concerned entities is flawed and as such the request for approval of this water company is fraudulent and not viable.
Rhodes Homes and its representatives do not care about our community and are only here to make millions by raping and pillaging the land, its water supply and its people of their futures. We hope that you will do something about this and pursue a total reexamination of this project and others that Mr. Rhodes is involved in.

Thank you,
Denise

Denise Bensusan
home: 928-692-6933
cell: 928-727-6933

Northwest Arizona Watershed Council
P.O. Box 3222
Kingman, Arizona 86402
928-757-2818

Sponsored by:
Arizona Department of Water Resources

Raindrops should not be wasted

March 31, 2008

Mr. Herb Guenther, Director
Arizona Department of Water Resources
3550 N. Central Avenue
Phoenix, Arizona 85012

Re: Comments on Water Adequacy Studies in Sacramento Basin, Mohave County, Arizona

Dear Mr. Guenther:

The Northwest Arizona Watershed Council (NAWC) is dedicated to the dissemination of factual and accurate information on water issues in Mohave County. To this end we wish to bring to your attention new information on the water demands for Sacramento Basin and comment on the adequacy of the studies that have been completed, as well as to ensure that current and future studies being conducted in this basin will be based on the most recent findings.

There have been several water adequacy studies completed in Sacramento Basin during the last several years in support of proposed developments and subdivisions, and in search of additional water for the County's industrial and Improvement District needs. These studies were based on information available at the time the studies were completed. New information has become available that will likely have a significant impact on the conclusions of some of these studies. The following discussion will attempt to highlight the items that we feel should be reviewed.

Summary of comments:

1. Two recently completed drill holes encountered bedrock at relatively shallow depth in an area of Sacramento Valley where previous projections indicated bedrock to be much deeper. This would have a significant impact on the amount of water available above the 1,200' depth.
2. Some studies completed prior to 2008 contain calculations of present and committed water demand for Sacramento Valley based on historical use that includes the water used by Mineral Park Mine during the Duval operation of the 1964 to 1980 time period. Recent news releases by the new owners of Mineral Park Mine indicate a much greater water demand

than previous operations, therefore; the water studies that rely on historical data are grossly underestimating the water demand from the mine.

3. Groundwater modeling is a primary tool used to study the impacts of groundwater pumping on an aquifer. There are several modeling techniques, the most advanced being numerical modeling usually using a model code developed by the U.S.G.S known as MODFLOW. Previous studies of Sacramento Basin used a less rigorous technique known as analytical modeling. Analytical modeling in Sacramento Basin was conducted using a computer code known as "THWELLS". Because of the urgent need to understand the impacts of water pumping on the groundwater of the basins in Mohave County, we feel that allowing the use of the more rudimentary analytical THWELLS modeling technique does not employ the most advanced and reliable predictive approach and should not be allowed.

Discussion:

New depth to bedrock information

Many workers have used the geophysical studies of Sacramento Valley by Oppenheimer and Sumner (1980) as a basis for determining the depth to bedrock in Sacramento Valley. In the Oppenheimer and Sumner report, the depth to bedrock near the center of the basin is estimated to be greater than 3,200'.

Recent drill results reported from water wells 55-211563 and 55-212874 (Driller's logs available on the Arizona Department of Water Resources (ADWR) 55 well registry database on the internet), show depth to bedrock to be 970' and 710' respectively. This does not agree with the Oppenheimer and Sumner estimates for this portion of the basin and has a direct bearing on the available water calculated in the modeling. The reason that the depth to bedrock was overestimated by Oppenheimer and Sumner could be because the bedrock encountered in the two water wells is a felsic volcanic tuff. This tuff has a low density, easily interpreted as alluvium in geophysical studies.

In addition, there is a marked alignment of washes that may mimic the location of a range front fault. This fault appears to have shallow bedrock to the west and deep bedrock to the east.

Water studies relying on the geophysical data to determine the depth to bedrock, and thus the amount of saturated basin fill, will over estimate the amount of saturated basin fill in the area of the two water wells noted. In addition, as ADWR does not accept bedrock as a reliable aquifer, the amount of available water should be reduced because the total amount of saturated basin fill alluvium is much less than estimated.

Water demand for Mineral Park Mine- historical versus new operations.

The Mineral Park Mine is constructing a mill and plans to be in operation by late 2008. Milling rates will be phased, starting at 25,000 tons per day, increasing to 60,000 tons per day. Based on a feasibility study completed in the latter part of 2007, the water demand for the 60,000 ton per day mill will be 16,000 acre feet per year, as per a newspaper article in the Kingman Daily Miner, 2007.

Previous milling by Duval Corporation during 1964 to 1981 was at a maximum rate of 20,000 tons per day (internal Duval memos). The water used by this operation reached a maximum of 5,120 acre feet per year. Based on a compilation of well records, a regional drop in static water level of 1 foot per year was experienced during the Duval operation. Local water level drops, as reported in USGS Scientific Investigations Report 2007-5182, were as much as 35' during the period Mineral Park was in operation.

The NAWC feels that recent water studies that used historic basin water use data to calculate committed demand should be re-evaluated using the new demand number, 16,000 acre feet per year, of the soon-to-be commissioned mill. Not using the new number for water demand will grossly underestimate the water drawdown and could lead to the water table falling below the 1,200' level, the lowest limit set by the ADWR for the approval of subdivisions. In addition, we are aware that although the ADWR has issued various Analysis of Water Adequacy letters in the basin, the mining use maintains a superior priority right to the water because mining falls under federal law and not state law, and all other uses become secondary, including development / subdivision uses. That being said, Mohave County needs to be informed of the impacts of the identified water use from the mining operations, and how these impacts effect existing water approvals issued by the Department for the Sacramento Basin areas.

Water modeling method

There are two principal methods to estimate the future impact of pumping groundwater: numerical modeling and analytical modeling. Both are done on computers. In numerical modeling, an algorithm is used to solve complex equations in either two- or three-dimensions allowing the incorporation of numerous factors that effect groundwater levels in an aquifer including:

- stream recharge,
- the effects of pumping from wells throughout the basin,
- the presence of shallow or deep bedrock,
- mountain front recharge,
- variability in the permeability of the materials filling the basin,
- changes in the ability of the aquifer to store water, etc.

An analytical model solves simple hydrodynamic equations. Therefore, it cannot incorporate the great variety of factors that effect groundwater levels in a basin. An

analytical model is necessarily two-dimensional (e.g. changes in aquifer properties with depth cannot be simulated). It is far more reliable to use a more sophisticated numerical computer model for long simulations into the future than to use an analytical model with so many limiting assumptions.

We are very concerned that the new data presented will have a significant effect on the current and future planning and development efforts within the Sacramento Basin area. It is our hope that you will seriously consider this new information in an expedient manner so that any anticipated impacts on Mohave County planning efforts can be identified and dealt with at this early stage. The NAWC believes that ADWR and the local government authorities should have the most up-to-date knowledge and the best scientific data on which to base their decisions. Our goal is to assist you in identifying, verifying, and quantifying water related issues in Mohave County. Please contact us if you need additional information.

Thank you for your continued support.

Sincerely,

Elno Roundy
Chairman
Northwest Arizona Watershed Council

Cc: Arizona Corporation Commission
Mohave County Board of Supervisors